

In the Claims

1.-12. (Cancelled)

13. (Currently Amended) A method of decreasing the number, or formation, of intratumoral vessels ~~to inhibit growth of melanoma and pulmonary metastases~~ in a mammal in need thereof comprising[[::]] administering by direct inoculation and electrotransfer to an intramuscular site, or an intratumoral site, in the mammal a therapeutically effective amount of an expression plasmid coding for the disintegrin domain-~~encoded by a polynucleotide consisting of the polynucleotide sequence shown in SEQ ID NO:1~~ consisting of the sequence shown in SEQ ID NO: 2 where the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 is encoded by a polynucleotide sequence SEQ ID NO:1 is operably linked to a promoter or expression control sequence and whereby the number, or formation, of intratumoral vessels is decreased.

14.-16. (Cancelled)

17. (Currently Amended) A method of treating melanoma in a mammal in need thereof by decreasing the number, or formation, of intratumoral vessels comprising decreasing ~~intratumoral vessels to inhibit growth of the melanoma~~ by administering via by direct inoculation and electrotransfer to an intramuscular site, or an intratumoral site, in the mammal a therapeutically effective amount of an expression plasmid coding for the disintegrin domain ~~encoded by a polynucleotide consisting of the polynucleotide sequence shown in SEQ ID NO:1~~ consisting of the sequence shown in SEQ ID NO: 2 where the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 is encoded by a polynucleotide sequence SEQ ID NO:1 is operably linked to a promoter or expression control sequence and whereby the number, or formation, of intratumoral vessels is decreased and melanoma in the mammal is treated.

18.-20. (Cancelled)

21. (Currently Amended) A method of treating pulmonary metastases in a mammal in need thereof by decreasing the number, or formation, of intratumoral vessels comprising ~~inhibiting the metastases by decreasing intratumoral vessels by administering via by direct inoculation and electrotransfer to an intramuscular site, or an intratumoral site, in the mammal a therapeutically effective amount of an expression plasmid coding for the disintegrin domain~~

~~encoded by a polynucleotide consisting of the polynucleotide sequence shown in SEQ ID NO: 1 consisting of the sequence shown in SEQ ID NO: 2 where the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 is encoded by a polynucleotide sequence SEQ ID NO: 1 is operably linked to a promoter or expression control sequence and whereby the number, or formation, of intratumoral vessels is decreased and the pulmonary metastases in the mammal are treated.~~

22.-24. (Cancelled)

25. (New) The method according to claim 13, wherein said polynucleotide sequence encoding the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 consists of the sequence shown in SEQ ID NO: 1.

26. (New) The method according to claim 13, wherein said expression plasmid coding for the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 is administered by direct inoculation and electrotransfer to an intramuscular site in the mammal.

27. (New) The method according to claim 17, wherein said polynucleotide sequence encoding the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 consists of the sequence shown in SEQ ID NO: 1.

28. (New) The method according to claim 17, wherein said expression plasmid coding for the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 is administered by direct inoculation and electrotransfer to an intramuscular site in the mammal.

29. (New) The method according to claim 21, wherein said polynucleotide sequence encoding the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 consists of the sequence shown in SEQ ID NO: 1.

30. (New) The method according to claim 21, wherein said expression plasmid coding for the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2 is administered by direct inoculation and electrotransfer to an intramuscular site in the mammal.